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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/691,778

10/23/2003

Jerry A. Pickering

10167

7165

7590 06/18/2007  
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EXAMINER

AFZALI, SARANG

ART UNIT

PAPER NUMBER

3726

MAIL DATE

DELIVERY MODE

06/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/691,778

Applicant(s)

PICKERING ET AL.

Examiner

Sarang Afzali

Art Unit

3726

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on After Final Amendment filed 5/22/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) 1-63,67,68,72-79,82-85 and 88 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 64-66,69-71,80,81,86 and 87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 64-66 and 69-71 are rejected 35 U.S.C. 103(a) as being unpatentable over Eddy et al. (US 6,159,588).

Eddy et al. teach a fuser member **20** (Fig. 2) comprising a base **4**; and a fusing surface layer **5**; comprising: a fluoroelastomer (col. 6, line s 25-26); and filler particles (col. 6, lines 27-41), with a modulus greater than the modulus of the fluoroelastomer (Modulus is a measure of stiffness of a given material. The filler is made of aluminum, which has a modulus greater than a fluoroelastomer which is not as stiff) at the fusing temperature, and with a mean particle diameter of at least about 1 to about 100 microns (overlaps the claimed range of at least about 50 microns), in at least the minimum proportion by volume of the fusing surface layer, and with at least the minimum mean particle diameter.

Regarding the limitations "so that, in fusing toner to substrate, the fuser member generates an image having a gloss number of about 5 or less" and "in fusing toner to substrate, the fuser member, at the equilibrium surface roughness, generates an image having a gloss number of about 5 or less", a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention

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and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The filler particles are heat conducting and have a greater thermal conductivity than the fluoroelastomer because the filler is made of aluminum. In addition, aluminum is considered inorganic (claim 71).

Eddy et al. teach the invention cited above including having a mean particle diameter of at least 50 microns as in recited claims 64-66.

As applied to claim 69, Eddy et al. teach that the filler particles, with a modulus greater than the modulus of the fluoroelastomer at the fusing temperature, comprise from about 10 percent by volume to about 20 percent by volume of the fusing surface layer (overlaps claimed range of about 10 percent to about 40 percent).

As applied to claim 70, Eddy et al. teach that the filler particles, with a modulus greater than the modulus of the fluoroelastomer at the fusing temperature, comprise from about 10 percent by volume to about 20 percent by volume of the fusing surface layer (overlaps claimed range of about 8 percent to about 35 percent), and have a mean particle diameter greater than about 55 microns.

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3. Claims 80, 81, 86 and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eddy et al. (US 6,159,588) in view of Donnelley et al. (US 3,669,707).

Eddy et al. teach the invention cited above including the fuser roller material such as polytetrafluoroethylene (col. 5, lines 16-20) but do not explicitly disclose the claimed ranges (claims 85 & 86).

Donnelley et al. teach using plastic filler particles such as polytetrafluoroethylene (col. 4, line 66) comprise from about 0.1 to about 20 weight percent (col. 6, lines 18-20, overlaps the claimed ranges).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have provided the invention of Eddy et al. with plastic filler particles such as polytetrafluoroethylene, in light of the teachings of Donnelley et al., in order to reduce offset and mechanical breakdown as suggested by Donnelley et al.

### ***Response to Arguments***

4. Applicant's arguments, see "REMARKS", filed on 5/22/2007, with respect to the rejection(s) of claim(s) 64-71 under 35 USC 103 (a) as being unpatentable over Eddy et al. (US 5,729,813) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Eddy et al. (US 6,159,588).

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Note that Donnelley et al. is only relied upon to teach plastic filler particles, which Eddy et al. is lacking.

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarang Afzali whose telephone number is 571-272-8412. The examiner can normally be reached on 7:00-3:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on 571-272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

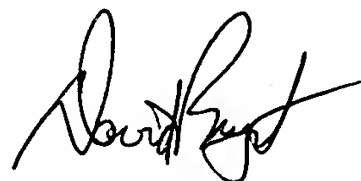
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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6/12/2007



DAVID P. BRYANT  
SUPERVISORY PATENT EXAMINER

6/13/07